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Farmers' participation in the development of land use policies for the Central Rift Valley of Ethiopia

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ABSTRACT

Farmers in Ethiopia are elementary for the implementation of land use policies. However, in order to effectively implement these policies, they need to be aware of them, and accept them accordingly. In this study we assess to what extent farmers in the Central Rift Valley are aware of prevailing land use policies in their area, to what extent they participated in the development of these policies, and how they perceive the impacts of these policies, using interviews with local farmers as well as stakeholders from governmental institutions at various levels. Farmers and local governments indicated that there was very little participation in the development of land use policies. Contrary, government informants at higher level indicated the opposite, suggesting a gap between farmers and local governmental institutions on the one side and higher governmental institutions on the other side. The perceived lack of participation of farmers led to a lack of ownership, involuntary participation, and failure to use the local knowledge, all hampering the effective implementation of these policies. The recently introduced land registration and certification process was identified as an exception, as it was the result of a participatory process, generally leading to acceptance upon implementation. Despite their low policy awareness, farmers could identify the impacts of land use policies on land use and land cover change, as well as its impacts on their. Further improvement farmer participation in the development of land use policies could increase ownership and thus yield more effective implementation and avoid social unrest.

1. Introduction

Studies have demonstrated that benefits from public participation in policy development accrue to all parties (Booth and Halseth, 2011; Fraser et al., 2006; Mitchell, 2005). This literature indicates that participation leads to more legitimate and fair decisions by offering a chance for those who are likely to be impacted by the decision to expose their preferences and needs. Specifically, participation improves the quality of policies by complementing expert knowledge with lay and local knowledge, and thus increases trust and acceptability of the final decision (Adger et al., 2003; Blackstock and Richards, 2007; Wesselink et al., 2011). Authors have argued that participation adds value to policy making (in terms of effectiveness, efficiency, impact and pertinence) and empower citizens in such a way that people realize they can solve the problems they face and have the right to contest unjust conditions (Adger et al., 2003; OECD, 2005; Wesselink et al., 2011). In addition, participation can improve trust by avoiding providentialism, corruption, and vigilantism, as it allows citizens to have sufficient representation (OECD, 2005). Yet, despite the large numbers of advocates in favor of participation (Chirenje et al., 2013; Mitchell, 2005; Wesselink et al., 2011), some skepticism remains about the extent to which benefits of participation are actually achieved (Cornwall and Brock, 2005; Koontz and Thomas, 2006; Singletone, 2000; Walker and Hurley, 2004).

Participation relates to the involvement of non-state actors throughout the policy cycle (Bewket and Sterk, 2002; Newig and Fritsch, 2009; Wesselink et al., 2011). In the context of land use policies in Ethiopia, including policies for natural resource management, soil and water conservation, land use plans, and the establishment of national parks, the most relevant non-state actors are smallholder farmers managing the land. Such participation could range from little influence, such as providing information, to a strong influence, such as consultation and negotiation (Maier et al., 2014). A number of studies have been conducted with regard to stakeholders' participation in the context of land use policies across the world, including Latin America (Booth and Halseth, 2011), North America (Irvin and Stansbury, 2004), Africa (Chirenje et al., 2013), Asia (Mauerhofer, 2016) and Europe (Neef, 2008). These analyses typically assess the perception of those

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people that are directly involved in a particular policy (Booth and Halseth, 2011) or project (Diduck et al., 2013). However, such assessment could give a biased result, as it does not include the perspectives of people that are not involved, neither does it typically compare perspectives, i.e. from government institutions and from farmers.

The federal constitution of Ethiopia stimulates active participation of local citizens in the development of land use policies. Specifically, articles 43(2) and 92(3) of the constitution give citizens the rights for full consultation and the expression of views in the planning and implementation of such policies that affect their livelihood. At the same time, several studies show that there is little participation of farmers in the development of land use policies in Ethiopia (De Graaff et al., 2013; Herweg and Ludi, 1999). This has been related to a lack of awareness among farmers (Bulkeley and Mol, 2003; Kilewo and Frumence, 2015), and increasing this awareness may increase the participation of farmers in policy development (Wesselink et al., 2011). However, we don't know how local farmers as well as their governmental institutions at various levels perceive the level of farmers' participation in the development of land use policies, and whether they are aware of their possibilities to do so.

The objective of this paper is to assess the participation of farmers in the development of land use policies in the Rift Valley of Ethiopia. To that effect we explore their awareness of existing land use policies, the level of participation in different phases of the policy cycle, and the perceived impact of these policies on land use, land cover, and their livelihoods. In addition, we explore what factors could explain these results. Based on previous research (Adhikari, 2009; Muneer et al., 2013) we expect that age, education, livelihood, tenure security, gender, marital status, and location could affect farmer's awareness of land use policies. Specifically, we hypothesize that younger people with a higher education are more aware of land use policies because they have more access to information. Moreover, we expect that farmers with a higher tenure security, and with a livelihood that is at least partly based on cropland have a higher awareness, as their relation with the land provide more incentive than pastoralists. We also hypothesize that men are more aware of land use policies than women, because men are normally in charge of the business, while women are more often in charge of the family. We have no reasons to assume that family size, or locations of the farm have any influence on policy awareness (Adhikari, 2009; McBride and Daberkow, 2003; Muneer et al., 2013; Obayelu et al., 2014).

2. Materials and methods

2.1. Study area

Ethiopia is a Federal State with decentralized power, distributed over five administrative levels: national (federal), regional, zonal, wereda, and kebele. The federal government is responsible for enacting federal laws which are applicable across the country, while regional states are responsible for the implementation of these federal laws as well as enacting laws which are applicable only to their specific region. The regional governments have established different land administration offices at zonal and wereda level. At kebele level the land administration committee is responsible for handling land issues. Each kebele is further subdivided into three kebele zones and each kebele zone, in turn, is divided into geres, consisting of five farmers each. Most of the time, farmers communicate any land-use related issues with the government through their geres.

The study area, covering 271 118 ha, is located in the Central Rift Valley of Ethiopia, roughly 225 km south of the capital Addis Ababa. The study area comprises of two weredas both of which are in the Oromia regional state: Arsi-Negele wereda, which is found in the West Arsi zone, and Adami Tulu Jido Kombolcha wereda, which is found in East Shoa zone (Fig. 1). In 2017, the study area had a total population of 535 501 (CSA, 2014), 78% of which lives in rural areas. Most of the rural population is subsistence farmers, based on mixed livestock and cropland farming (Ariti et al., 2015).

In the 1970s, the region was dominated by forests, woodlands and grasslands. However, over the past four decades, most of the land has been converted into cropland, mainly to support the growing population (Ariti et al., 2015; Garedew et al., 2012; Meshesha et al., 2012). As a result, an increasing share of the farmers shifted from pastoralism to a livelihood of mixed cropland livestock. In addition, the region has experienced severe land degradation due to unsustainable land management practices. At the same time, farmers are constrained by lack of capacity, lack of information and lack of knowledge to make the necessary adaptive measures (Ariti et al., 2015).

2.2. Data acquisition and data analysis

We base our study on a total of 100 interviews with famers from the study region, which we use to quantitatively analyze the research questions posed above. These farmers are selected from 20 kebeles, 5 from each kebele, using random sampling. In addition to these farmers, we have interviewed 52 key informants from governmental institutions at regional (9), zonal (12), wereda (12), and kebele (19) level, to qualitatively and quantitatively compare the perception of farmers with the perception of staff of governmental institutions. The key informants at institutional level were selected using purposive sampling, to ensure that we cover the institutions that are directly related to the development or implementation of land use policies at different administrative levels. A complete list of these institutions is included in the supplementary material (SM1).

The semi-structured questionnaire was divided into four sections, related to 1) the awareness of farmers of existing land use policies, 2) the participation of farmers in land use policies, 3) the impacts of land use policies on land use, land cover, and livelihoods of farmers. Based on Lambin et al. (2003) and Jakobson et al. (2007), we expect land policies to have an impact on land use, land cover and farmers' livelihood. and 4) factors hampering the effective implementation of land use policies (see also Fig. 2). Land use policies in this paper include governmental laws, regulations, ruling, decisions, orders, or a combination of these which directly affect the usage of the land by smallholder farmers (Birkland 2005). These relate for example to land and water conservation, afforestation, and national parks. In consultation with local experts and government offices, we identified a list of ten land use policies that we provided to the farmers to measure the level of their awareness (SM2). Participation in land use policies was assessed for the four phases that normally comprise the policy cycle: agenda setting, policy formulation, policy implementation, and policy evaluation (Barkenbus, 1998; St-Laurent et al., 2017). Participation in this study was interpreted as any type of inclusion of smallholder farmers in any stage of the policy cycle (Wesselink et al., 2011). We further characterized participation along the gradient from no influence to high influence, based on the activity that characterized the participation (presence, providing information, consultation, co-decision, and negotiation). Participation of other non-state actors was outside the scope of this research. As we interviewed farmers as well as stakeholders from governmental institutes, we compared their perception on these issues for all questions. Moreover, we recorded various farmer characteristics to assess our hypotheses on the relation between these characteristics and their awareness of land use policies.

3. Results

3.1. Farmer's awareness of land use policies

Only few farmers indicated that they were aware of any land use policies, land use plans, restrictions on the use of their land, and institutional actors that are involved in land use policies. Specifically, 24%, 5%, 4%, and 27%, of all farmers, were aware of the existence of at

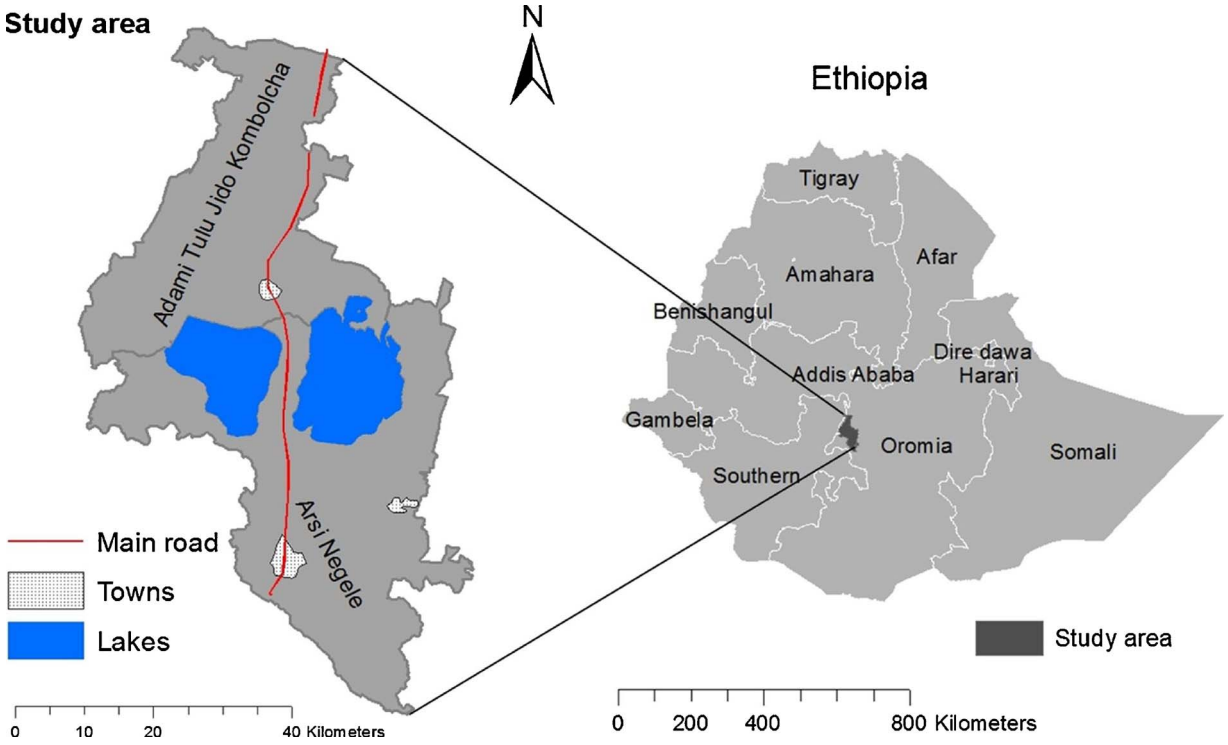

Fig. 1. Regional states of Ethiopia, and the location of the case study area.

least one land use policy, land use plan, restriction on the use of land, and relevant institution, respectively. Farmers were subsequently provided with a list of ten specific land use policies which were identified in advance, to assess their awareness of existing policies. Consistent with the previous question, participants recognized on average 1.17 out of 10 policies and more than 75% of the farmers failed to recognize any of the land use policies on the list. However, farmers from Adami Tulu Wereda recognized more policies than farmers living in Arsi Negele Wereda (see Table 1). This could be the result of differences in the efforts made by the administrative offices.

Farmers that were aware of land use policies were also asked to indicate in what phase of the policy development cycle they became aware. Accordingly, most of the farmers only became aware of the land use policies at the implementation stage, while few farmers were already aware of them in the agenda setting and policy formulation phases. In the latter case, farmers were typically involved in the policy development process by invitation. However, the participating farmers did not know how and why they were selected to take part in the process. No farmers became aware of policies at the policy evaluation phase.

Based on the assessment of farmer characteristics, we found that age, family size, education, gender, livelihood, and location are significantly related to farmer's awareness of land use policies (Table 1). Moreover, family size, education, location, and gender also significantly affect farmers' awareness of the relevant land use policies. These findings confirm our hypotheses that age, education, gender, and livelihood have an impact on the land use policy awareness of the farmers. However, we rejected the hypothesis that family size and location have no impact on policy awareness. Unlike the findings of Islam et al. (2014) we concluded that family size has an impact on policy

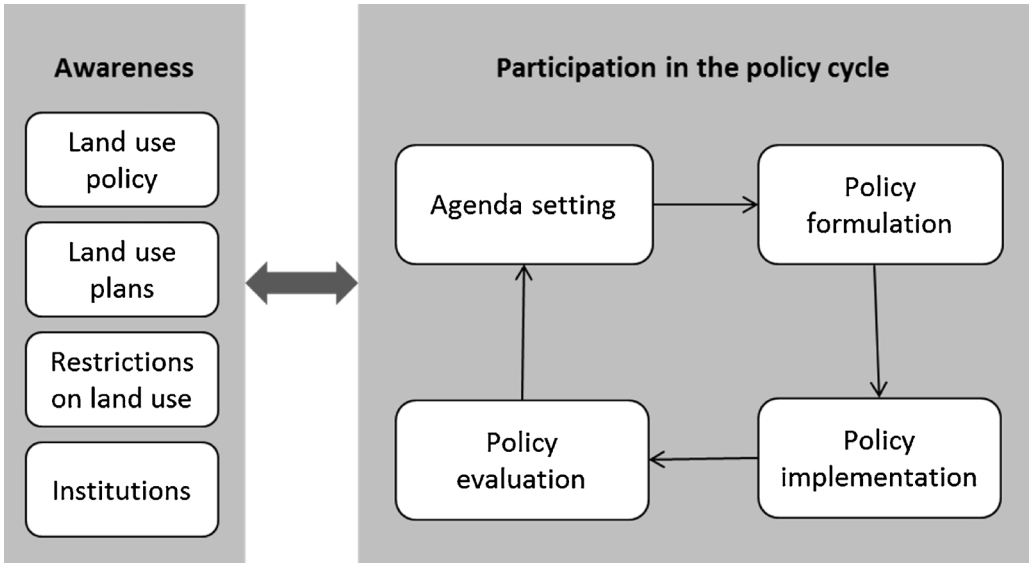

Fig. 2. Framework of the study.

Table 1
Factors affecting farmers' awareness of land use policies.

Variables	Test	Null hypothesis	Relation to land use policies awareness		References for Null hypothesis
			Result	evaluation	
Age	Mann Whitney	Younger farmers are more aware of land use policies than older farmers.	0.000***	Confirmed	Adhikari (2009) and Muneer et al. (2013)
Family size	Mann Whitney	Family size has no impact on awareness	0.000 ***	Rejected	Islam et al. (2014)
Education	Mann Whitney	Educated farmers are more aware of land use policies than the uneducated farmers.	0.001**	Confirmed	Adhikari (2009) and Muneer et al. (2013)
Location	Chi Square	Location has no impact on awareness	0.019*	Rejected	
Gender	Chi Square	Men are more aware of land use policies than woman	0.048*	Confirmed	Adhikari (2009)
Livelihood (income diversification)	Chi Square	Farmers with mixed farming activities are more aware of land use policies than farmers that only have livestock.	0.002**	Confirmed	Muneer et al. (2013)
Land ownership	Chi Square	Types of land ownership has an impact on policy awareness	0.104	Rejected	Muneer et al. (2013)

awareness as farmers with lower family size are more aware than families with larger numbers. Our result also indicated that tenure security has no impact on land use policy awareness unlike findings of Muneer et al. (2013).

3.2. Farmers' participation in land use policies

3.2.1. Agenda setting

Farmers and institutional actors have a different perception of farmer participation in the agenda setting stage of the policy cycle (Fig. 3). While 58% of the institutional actors indicated that farmers participated in the agenda setting stage 15% of the farmers did this. Note that both perceptions are not contradicting, given that institutional actors are likely to be aware of participation of any farmer in this process, while farmers that are not involved themselves might not be aware of others that did so. Yet, 14 out of the 15 farmers that participated the agenda setting and policy formulation phase indicated they had little or no actual influence, as their role was merely to provide information. Moreover, the perception of institutional actors about farmers' participation in this stage declines as we go down from regional level to the kebele level. For example, 89% of regional bureaus indicated that farmers were involved in the agenda setting phase, while only 42% and 37% of the institutional actors at wereda and kebele levels had this perception, respectively. Yet, both farmers and lower level institutional actors indicated that agendas are mostly set or initiated at the top level governmental institutions. This could indicate a lack of communication between different governmental institutions as well as between institutions and farmers. This situation is also reflected in the responses from interviewees:

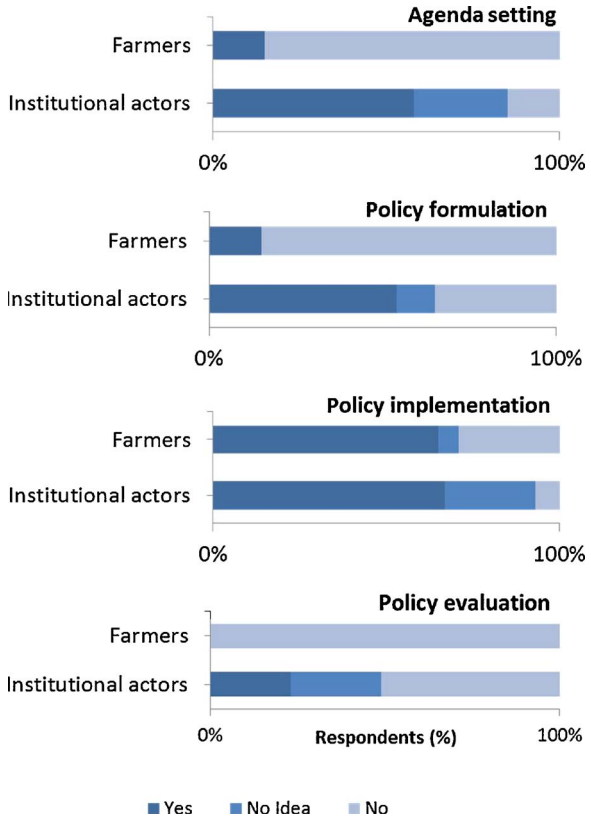

Fig. 3. Perception of farmers' participation in the policy development cycle. (The difference between the perception of farmers and of institutional actors was statistically significant for all four phases at $P < 0.05$ using a Chi-Square test).

Farmer from Arsi Negele wereda: "… *We have never been invited or consulted by any government representatives to discuss policy agendas. Almost all policy agendas are set at the top level and we do not have any idea how these agendas are set …*"

Another farmer from Adami Tulu: "…*We have asked different government officials to discuss the harmful investment activities that affect our lives by excessive use of river water for irrigation and factory processing, but none of our calls have been considered by the policy makers. …*"

Institutional actor from Adami Tulu wereda office "…*absence of participation in the agenda setting/problem definition is not only a problem of the farmers. Like the farmers, our office did not take part in most of the agenda setting process and we only found out about many issues when the policy document was finalized and sometimes when experts tell us that they are developing a policy and even sometimes by rumor…*"

3.2.2. Policy formulation

Farmers' participation in the policy formulation phase is largely comparable to the participation in the agenda setting phase. Most of the institutional actors at the top level, such as regional and zonal bureaus, indicated that farmers participated in the policy formulation process through their representatives, while only 15% of the farmers indicated that they were aware of any farmer participation, either directly or through their representatives (Fig. 3). The view of the farmers is also shared by most of institutional actors at lower levels such as wereda and kebele level. These views are further illustrated by some of the responses from farmers as well as institutional actors:

Farmer from Arsi Negele: *"I daresay I have never participated in any policy formulation process. Normally I am supposed to be represented by the person whom I elected for the parliament. But the representatives, after the election, never come back to consult the people for any policy formulation*

process …"

Institutional actor from Adami Tulu wereda: "*…most of the land use policies do not take into account the actual situation on the ground during policy formulation. A good example for this is the formulation of the rural land proclamation to restrict the use of land across the country without taking into consideration the difference in landscapes and the socioeconomic status of the farmers…*"

The perception of farmers' participation in the policy formulation process also varies among institutional actors of different administrative levels. For example, nearly 90% of the regional bureaus indicated that farmers participated in this phase, while only 42% and 37% of the institutional actors at wereda and kebele level, respectively, indicated so. Moreover, when farmers took part, their participation was mainly limited to workshops for confirmation purposes, according to officials from lower level institutions, hence suggesting only little actual influence. This is consistent with previous studies conducted in other African countries, such as Tanzania, Zimbabwe, and Mozambique (Chirenje et al., 2013) and Northern and Southern parts of Ethiopia (Tessema, 2000), which also found the local communities' to have little opportunities to deliver their local knowledge in the policy formulation process.

3.2.3. Policy implementation

The implementation stage of the development cycle for land use policies is an operational phase, where policies are translated into actions to solve land related problems (Theodoulou and Kofinis, 2004). Contrary to the agenda setting and policy formulation phases, the majority of the farmers participated in this phase. Moreover, the perception of institutional actors and farmers are more similar, especially when compared to the disparity concerning the agenda setting and policy formulation phases: 65% and 67% of the farmers and institutional actors, respectively, indicated that farmers participated in the implementation process of at least one land use policy (See Fig. 3). This agreement between farmers and institutional actors was to be expected, as many policies directly affect farmers, yet it contradicts the farmers' awareness of land use policies as indicated in the first section of the questionnaire.

3.2.4. Policy evaluation

The perception of institutional actors and farmers about farmers' participation in the evaluation phase is relatively consistent. More than 51% of the institutional actors, especially at lower administrative levels, share the views of the farmers that the farmers were not involved in the evaluation of policies. Only a small portion of the institutional actors, mostly at higher administrative levels, believed that the farmers were part of this process (See Fig. 3).

One of the main reasons indicated for the low participation in the evaluation stage is a lack of access to policy information. There is a significant difference between farmers and institutions perception regarding farmers' access to policy related information (Mann-Whitney test: $P < 0.05$). Most of the farmers indicated their access to policy information was either bad or very bad, while almost half of the institutional actors indicated access to policy information by farmers was either good or very good (Fig. 4). Similar to our assessment of the agenda setting and policy formulation phases, institutional actors at wereda and kebele level agree more with the farmers' evaluation, while institutional actors at higher levels generally disagree with the farmers' view. According to the interviewed farmers, the lack of information relates to different types of information, such as publication of policies, the purpose of these policies, land development projects, compensation schemes, and transaction records of land use rights, contact information of responsible government agencies, and the mechanisms for holding the local government accountable for land use decisions.

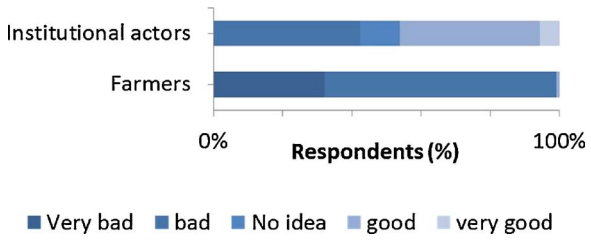

Fig. 4. Access to policy information according to different actors.

3.2.5. Farmers' influence in policy development

Participation in the different phases of the policy cycle does not necessarily imply influence, as becomes apparent from the responses by farmers in the questions above. Farmers that participated in the agenda setting stage and the policy formulation stage indicated that their role was mostly to provide information, suggesting very little actual influence. Accordingly, we found that the perception of farmers and institutional actors at the top level differed with respect to farmer influence on the policy development. Most farmers claimed that they have little influence, as most land use policies are initiated and developed by the government without consultation of farmers. Overall, 64% of the farmers believed they have no influence at all in policy development, while 29% of them believed to have very little influence through giving information in the policy development cycle (Fig. 5). On the other hand, 23% of the institutional actors, most of them at the top level, believe that farmers have much influence in policy development, while 46% of them, mostly at zonal and wereda level, believed the farmers to have some influence through consultation in the policy development process. However, 63% of the institutional actors at the kebele level believed the farmers to have either no influence or little influence on policy matters. According to one farmer from Arsi Negele, it is hard to change a policy once it becomes a law, because of a number of reasons. First the farmers do not have the necessary information and knowledge to influence policy makers, as they are not involved or informed. Second, even if they have the knowledge about policy matters, there is very little interest by policy makers to accommodate their knowledge. Third, their feedback is not properly communicated to higher level policy makers. These could partly be a result of the low interest of higher level institutions to take feedback or inputs from the local levels.

3.3. Impacts of land use policies

3.3.1. Impacts on land use and land cover change

Despite a low awareness of specific land use policy issues, farmers were able to indicate the impacts of policies on the change in land use and land cover. Most farmers indicated that forests, grasslands, and water have declined in the past four decades (Table 2), mainly due to the 1975 land proclamation, the 1995 constitution, and water, irrigation, and investment policies, respectively. They also indicated that cropland has expanded at the expense of other land use types, mainly due to the 1975 land proclamation and the land registration and certification programme. These perceived policy impacts were also clearly

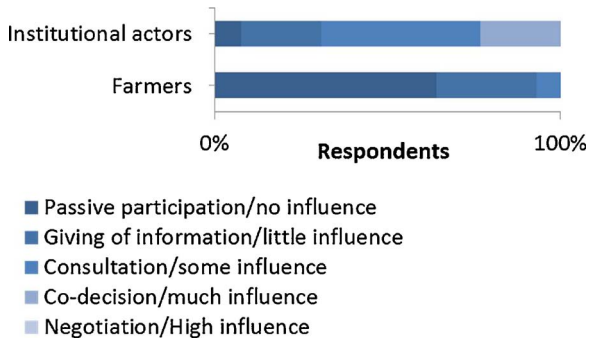

Fig. 5. Perception of farmers' influence in policy development.

Table 2
Farmers' perception of the effects of policies on recent land use and land cover changes.

Perceived Changes	Respondents (%)			
	Forest	Cropland	Grassland	Water
Decrease	94	0	97	62
Increase	5	99	0	0
No Idea	1	1	3	37
No change	0	0	0	0

indicated in their responses:

One farmer from Arsi Negele: "*The investment policy is affecting the water resources of the area, especially river Bulbula and Lake Abijata. The use of river Bulbula, which is the main tributary for Lake Abijata, for irrigation and factories, has caused the river to dry up, contributing to the shrinkage of Lake Abijata…*"

Another farmer from Arsi Negele: *"Following the 1975 land proclamation, farmers destroyed a lot of forests and grazing lands to expand their cropland…"*

A farmer from Adami Tulu: *"This particular area was known before for its dense acacia trees, but now all of the trees are destroyed for investment purposes. We believe that the return on investment would not compensate for the lost forest …"*

This response was also supported by a kebele chairman: *"By the time the investor started to cut down trees, we reported to higher officials that the area was a closed dense acacia forest which could be used for other purposes without affecting the environment. However, the investment was finally approved and completed despite our repeated objection and warning…"*

One farmer living in Abijata Shala National Park: *"Though we have been living in the park before its establishment we were not consulted in any of the process. As a result we have not yet fully accepted the boundary of the park and there has been a serious of conflicts between the park management and the local people, sometimes claiming lives. Most of the people in the park have lost sense of ownership for the land and uncontrolled use of forest and water resources became so pervasive affecting not only the park but also our livelihood"*

3.3.2. Impacts on farmers' livelihood

Most farmers in the study area used to be pastoralists before the declaration of the 1975 land reforms. After the land reform, most of them shifted to mixed farming, leading to shortage of grazing land and massive destruction of the nearby forest due to cropland expansion. 26% of the farmers also indicated that the land use certification programme improved their productivity, by increasing a sense of ownership of their land. At the same time, some of the farmers indicated that the younger generation is facing a shortage of land, due to high population pressure and a lack of flexibility in the current land use policy regarding the sales of land (Fig. 6).

One farmer living in Adami Tulu: *"The land use registration and certification process was so transparent and participatory. I have directly involved during the measurement and registration process and my participation in the process made it so easy. After securing the certificate I have developed a sense of ownership, invested more on my land and increased my productivity through the use of fertilizer."*

Farmer living in Arsi Negele "*Before the 1975 proclamations, we used to be pastoralists, but after the proclamation we started to practice mixed farming, which gradually dominated the livelihoods of the farmers in the whole wereda…*"

Another young farmer in Arsi Negele *"we are suffering from a shortage of farmland, due to the increased population as well as the restrictions on selling the land. Almost all land is occupied right now and the share of land in each household decreases as the size of the family increases.*

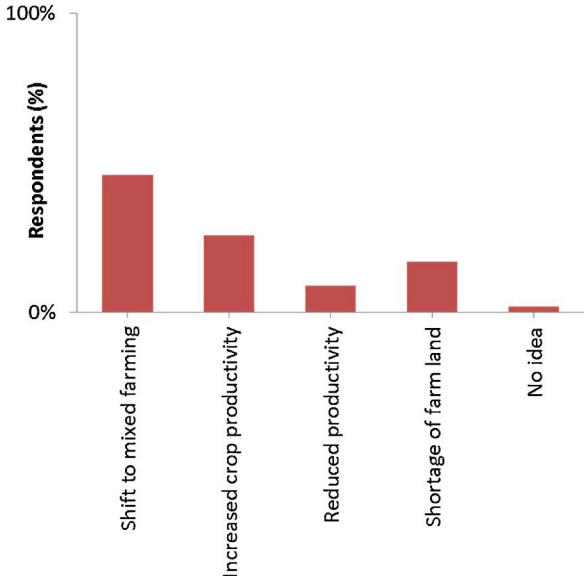

Fig. 6. Perceived policy impacts on farmers' livelihood.

3.4. Factors hampering the implementation of land use policies

3.4.1. Lack of awareness and alternative livelihoods

Many interviewed farmers as well as many institutional actors indicated that a lack of awareness and a lack of alternative livelihoods are important factors behind policy implementation failures. One illustrative example is the implementation of the rural land administration and use policy, which imposes the following restrictions on the use of land: *"1) if the slope of the land is less than 30% its management shall follow the strategy of soil conservation and water harvesting techniques. 2) Growing annual crops on rural lands having a slope gradient of 30–60% may be allowed only through making bench terraces. 3) The rural land with a slope gradient of greater than 60% shall not be used for crop production and free grazing; they shall be used for development of trees, perennial plants and forage production "*. However, only 4% of the interviewed farmers were aware of the existence of these restrictions. Consistently, institutional actors indicated that this policy has not been enforced for two major reasons: first, there is a lack of capacity to create the awareness among farmers about the restrictions and its importance, and second, there is an absence of alternative livelihoods for the farmers as implementing the policy will basically remove the possibilities to continue farming for many of them.

Farmers were also asked to express their willingness to cooperate in the implementation of these land use restrictions. In response, only 24% of the farmers indicated their willingness to cooperate. On the other hand nearly 40% of the farmers indicated that it would be hard to accept and implement the policy, while 13% of them requested improvements or amendments on the land use policy before its implementation. Moreover, 20% of the farmers had no clear idea about their response. These attitudes were expressed as follows:

Farmer from Arsi Negele wereda: "*…as you can see, our farmland is full of steep slopes, which will make the implementation of the land use restrictions very difficult. We would be willing to cooperate in the implementation of the policy as long as we are able to get another plot of the same size as a substitute or another means of livelihood ….*"

Institutional actor from Adami Tulu: "*…I believe that a failure to create awareness among the farmers resulting from lack of coordination and cooperation among governmental institutions and the local community is a major problem for the effective implementation of land use policies, including the restrictions on the use of steep slopes for agriculture….*"

Another farmer from Arsi Negele wereda: "*Almost everybody in the wereda will be out of land if this policy is going to be implemented, and no*

Fig. 7. Several locations in the study area where slopes over 60% are cultivated without any conservation measures.

farmer will accept such restrictions as most of them do not have alternative means of livelihood…"

While the majority of the farmers in Arsi Negele would find it difficult to follow such rule, the majority in Adami Tulu wereda was willing to accept it. This difference could emanate from the nature of the landscapes in the two weredas, as Arsi Negele wereda is more mountainous than Adami Tulu. The researcher also noted that the farmers, especially in Arsi Negele wereda, are cultivating hills/mountains as steep as 75% and above without the practices of any soil and water conservation mechanism (Fig. 7).

3.4.2. Lack of ownership

Lack of ownership of a policy is a challenge for the effective implementation of land use policies. Frequently, farmers are forced to comply with land use policies, especially on conservation policies, without even knowing the ultimate goal or purpose of the policy. For example, the kebele administrator can enforce participation by telling farmers that they would be denied of some benefits from the government if they don't cooperate. One farmer stated that although they plant an enormous amount of trees every year, initiated by the government, many of them do not survive, mainly due to lack of ownership by the farmers; they don't feel responsible for maintaining these trees.

A key informant from the government intuitions has indicated the implementation problem of the land use policy as follows: "…*most of our past efforts to implement conservation policies did not yield the expected results, mainly due to the lack of ownership, created by a top-down process. For example, the decision to establish the Abijata Shala Lake National Park came from the central government, without the proper consultation of the farmers residing in the park. After four decades, the park is believed to be only a paper park, as most of its area is inhabited by farmers. Such absence of ownership makes the operation of the park very difficult.*"

3.4.3. Involuntary participation

Although higher level institutional actors often believe that farmers to participate voluntarily in the implementation of land use polices, only 7% of the farmers indicated that this was the case. Most of the time participation is involuntary, as farmers are simply do what is requested by local administrators and not because they see the advantage of such policy. For example, 55%, 53%, and 51% of the farmers have participated in the implementation of land use policies such as water, wetland, and soil conservation policies, respectively, as laborers, while they have no idea how these policies were initiated and designed. Such perception could emanate from a lack of ownership, which in turn could relate to a lack of participation.

This is what one farmer indicated with respect to their participation: "*Most of the time our participation in the implementation of land use policies are not voluntary, and limited to a labour service. We are, mostly, instructed, by the kebele officials, to participate through the provision of labour service and failure to do so is subject to some fine.*"

Involuntary participation as a laborer is not unique for this study area. A study conducted in the northern part of Ethiopia has indicated that only 35%–40% of the farmers participated in the water conservation works voluntarily, while the remainder asserted that they participated simply because they were forced to do so by the kebele administration and the development agents (Bewket and Sterk, 2002). Although, this type of work is also considered participation by our definition, it is a fundamentally different type of participation (Chambers et al., 1993). According to Chirenje et al. (2013), policies that are prepared by outside experts, irrespective of their technical soundness, cannot inspire the local people to participate in their implementation.

4. Discussion

4.1. Discussion of results

Our results indicate that there is a disagreement between government officials and local farmers about the extent to which the constitutional rights of participation are being exercised in the development and implementation of land use policies in Ethiopia. This

disagreement could be a result of a lack of information, suggesting a lack of communication from higher governmental institutions. However, this does not preclude the opinion of farmers as well as local officials that many farmers have little involvement in the development of land use policies. For example, farmers may experience more participation when they are either physically present or represented by someone whom they know. Farmers also expect that local knowledge and values are considered and that their voices are heard. In other words, farmers expect influence and thus strong participation, while most current participation is passive and weak. For higher level institutions the presence of a number of farmers to provide information could be considered as participation, irrespective of how the farmers are represented. Yet, the recent moves made by the regional as well as the federal government to cancel controversial land use policies could be a reaction of these different views on participation, the reason for this move was a claim that they were not participatory and inclusive of the local communities.

Policy development requires confronting a world of multiple institutional actors whose cooperation and coordination are needed for implementation success (O'Toole, 2000). The difference in the perceived participation of farmers in policy matters by higher and lower administrative level could be an indication of lack of coordination and cooperation among the institutional actors, which could also have a large impact on the perception of the farmers. According to Imurana et al. (2014), policy makers in Africa mostly focus on a limited set of variables, such as political and economic variables, and fail to include the social, administrative, and environmental variables. As a result, the policy formulation process typically starts with high officials of government and policy actors, omitting the people that are eventually targeted (Makinde, 2005). Many developing countries, especially those in Africa, vigorously employed a non-participatory approach towards policy making, yielding policies that are dictated by those in power while the rural communities are relegated to the position of recipients and implementers (Hughes, 2001). Our results indicate that Ethiopia is not an exception for this, as policies are developed by those in power according to our interviewees.

4.2. Implications of participation in Ethiopia

The potential of increased participation in the development of land use policies in Ethiopia is illustrated by the successful implementation of proclamation number 456/2005. Proclamation number 456/2005 reaffirms the rights to ownership of land to be vested in the state and the people. Article 6(3) of the proclamation also states "any land holder of rural land shall be given holding certificate by the competent authority indicating the size of the land, land use types and cover, level of fertility and boarder, as well as the obligation and right of the holder." This programme was the result of a participatory development, and yielded a very large yet, fast, pro-poor, and cost effective implementation. Farmers participated in the registration process through Land Administration Committees at the community (kebele) level, which were responsible for the actual implementation of this policy on the ground, including awareness creation, land measurement and registration, issuance of temporary certificate, conflict resolution, etc…. These committees included representatives from each village which were elected by popular vote (Bezu and Holden, 2014; Deininger et al., 2008; Deininger et al., 2012). Some 25 million rural parcels were registered within three to five years. Most of the farmers indicated that they had enough participation during the land registration and certification process and currently they feel more secured than before.

Yet, Ethiopia has also experienced the consequences of a lack of participatory policy development, as protest started in Oromia Region in reaction to the proposed integrated master plan for Addis Ababa. The development of this plan was characterized by a lack of transparency and inclusiveness in its policy making process (Andargie, 2015). Consequently, the plan was cancelled by the federal and regional governments in response to the resistance by the local community (Challa, 2016). This could be interpreted as a confirmation of the legitimacy of the request by the local community (Muindi, 2016). Still, these changes were only announced after the protests against the implementation of certain land use policies caused multiple casualties in the local population (BBC, 2016; Iaccino, 2015). Interviewees from the government as well as farmers indicated that the limited incorporation of local knowledge during the policy development process has become a major source of conflict between government officials and the local people, especially at times of implementation. This was also observed in the Northern parts of Ethiopia, where farmers' participation in the implementation of soil and water conservations was limited to labor services, rather than using their local knowledge (Tessema, 2000).

Both examples show the potential consequences of a strong participation as well as a lack thereof for in the development of land use policies. Hence they confirm the claims that strong participation can increase support for the implementation of land use policies (Hillier, 1999; Illsley, 2003; Scoones and Toulmin., 1998). Similarly, these examples illustrate other claims that participation could avoid misunderstanding and thereby overcome potential resistance from the local community (Chirenje et al., 2013; Rouillard et al., 2014). Hence, our results suggest that the development and implementation of land use policies in Ethiopia could benefit from an increased and stronger participation, to ensure that farmers feel ownership of these policies, and that they can control the land they manage and depend on (Songorwa, 1999).

5. Conclusions

Our study finds that farmers in the Central Rift Valley have little awareness of land use policies, and that they hardly participate in the development of these policies. At the same time, governmental institutes indicate that their policy development process is participatory, as the law prescribes. This mismatch could be due to a lack of communication, or different interpretation of participation, as farmers mostly participate by providing information rather than co-designing policies. Most farmers only learn about policies upon implementation, when they are required to participate regardless of their opinion. This lack of participation could affect the implementation of land use policies, and suggests that stronger participation could lead to more effective land use policies and thus more sustainable land management.

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Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at https://doi.org/10.1016/j.landusepol.2017.11.051.

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